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**CERTIFICATION OF CONSULTANT**

The firm of E. Harold Munn, Jr. & Associates, Inc., Broadcast Engineering Consultants, with offices at 100 Airport Drive, Coldwater, Michigan, has been retained for the purpose of preparing the technical data forming this report.

The report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission.

I declare under penalty of perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

E. HAROLD MUNN, JR. & ASSOCIATES, INC.

June 2, 1992

By



E. Harold Munn, Jr., President

100 Airport Drive, Box 220  
Coldwater, Michigan 49036

(517) 278-7339

## DISCUSSION

This firm was retained to prepare the required engineering report in support of an application for a new Educational FM Broadcast Station serving the area of Fort Smith, Arkansas.

It has been determined that FM Channel 209(A), 89.7 MHz, may be used at the site specified without interference to or from any existing or proposed station. The details of the channel allocation are included as Exhibit E-6 of this report.

The transmitter site proposed in this application is within the affected radius of one Channel 6 television station. The details concerning the potential of interference to the TV protected contour are found in Exhibit E-7 of this report.

The FM antenna will be mounted on the side of an existing tower, owned by others, which supports various land mobile facilities. There will be no increase in the height of the structure.

The proposed 1.0 mV/m contour has been calculated in accordance with the Rules, and the plotted data forms Exhibit E-1 of this report.

The data in this application amends that supplied with BPED-900816MA, to reduce the effective radiated power from 1.0 to 0.8 kW. The purpose is to eliminate prohibited contour overlap with the pending proposal for the use of Channel 207C2 at Fayetteville, Arkansas, in BPED-900823MA. It is the understanding of this applicant that BPED-900823MA is also being amended on a mutual basis to eliminate the overlap. The map exhibit of E-6 shows the revised contours of each proposal.

EXHIBIT "A"

The transmitting facility is so located that there is some resident population within the predicted "blanketing" contour, as defined in 47 C.F.R. 73.318. The applicant agrees that full compliance with the procedures and requirements of 73.318(b)(d) will be attained.

The applicant will take such engineering steps as may be required to satisfy complaints of "blanketing" including, but not limited to, the installation of filters, traps, or other devices to satisfy said complaints within the specified time period.

This applicant accepts full responsibility for the elimination of any objectionable interference.

The proposed transmitter is located within 10 km of existing or proposed FM and TV transmitters. This applicant does not believe that there would be any adverse effects on the operation of any other facility as a result of a grant of this application. The frequency separations, and the physical distance between the facilities should preclude any harmful effects.

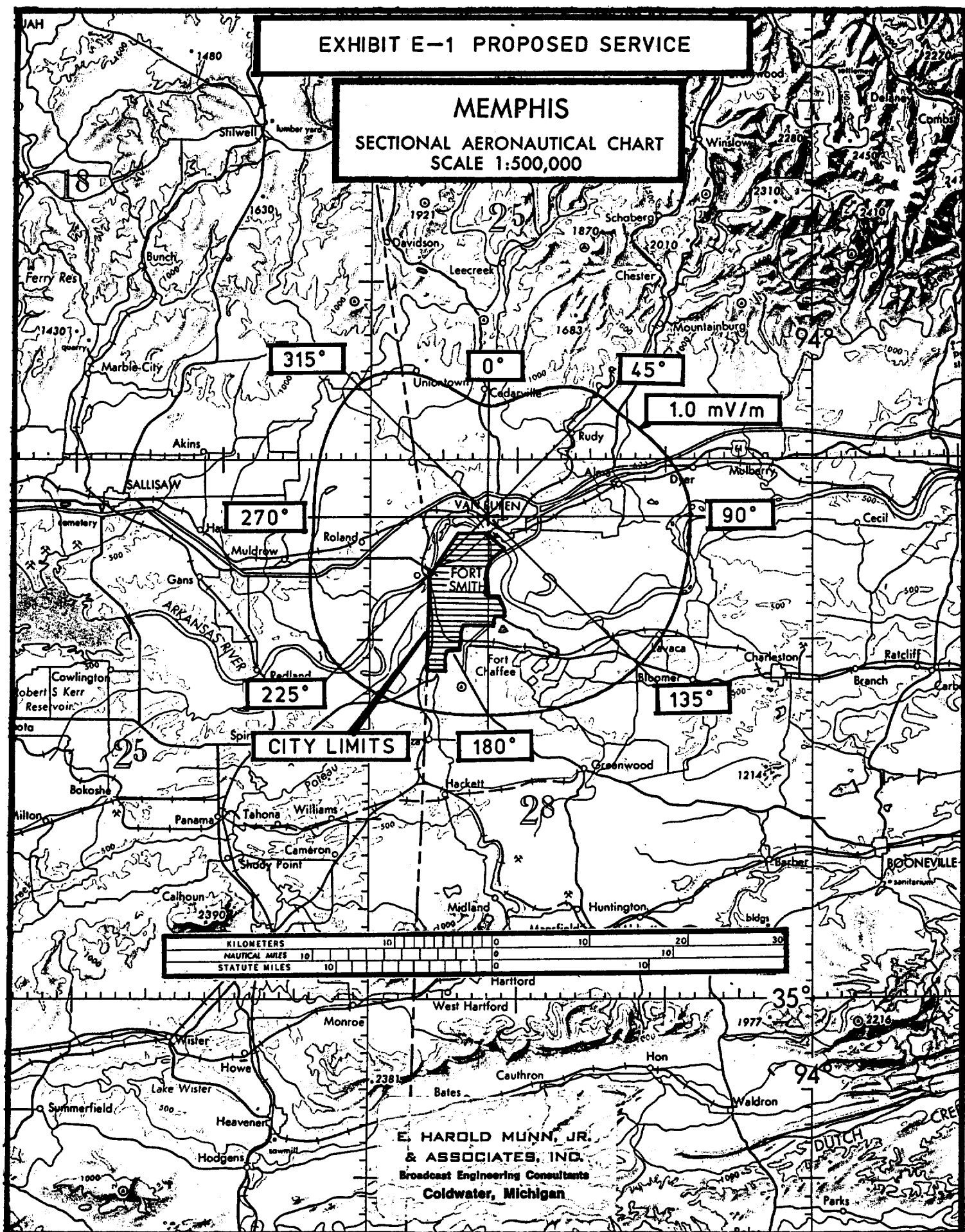
In the event such harmful effects are noted, including but not limited to receiver-induced or other types of modulation, the applicant accepts full responsibility for the elimination of any objectionable interference to facilities in existence or authorized, or to radio receivers in use prior to grant of this application.

The applicant will take such engineering steps as may be required to satisfy complaints including, but not limited to, the installation of filters, traps, or other devices.

EXHIBIT E-1 PROPOSED SERVICE

MEMPHIS

SECTIONAL AERONAUTICAL CHART  
SCALE 1:500,000



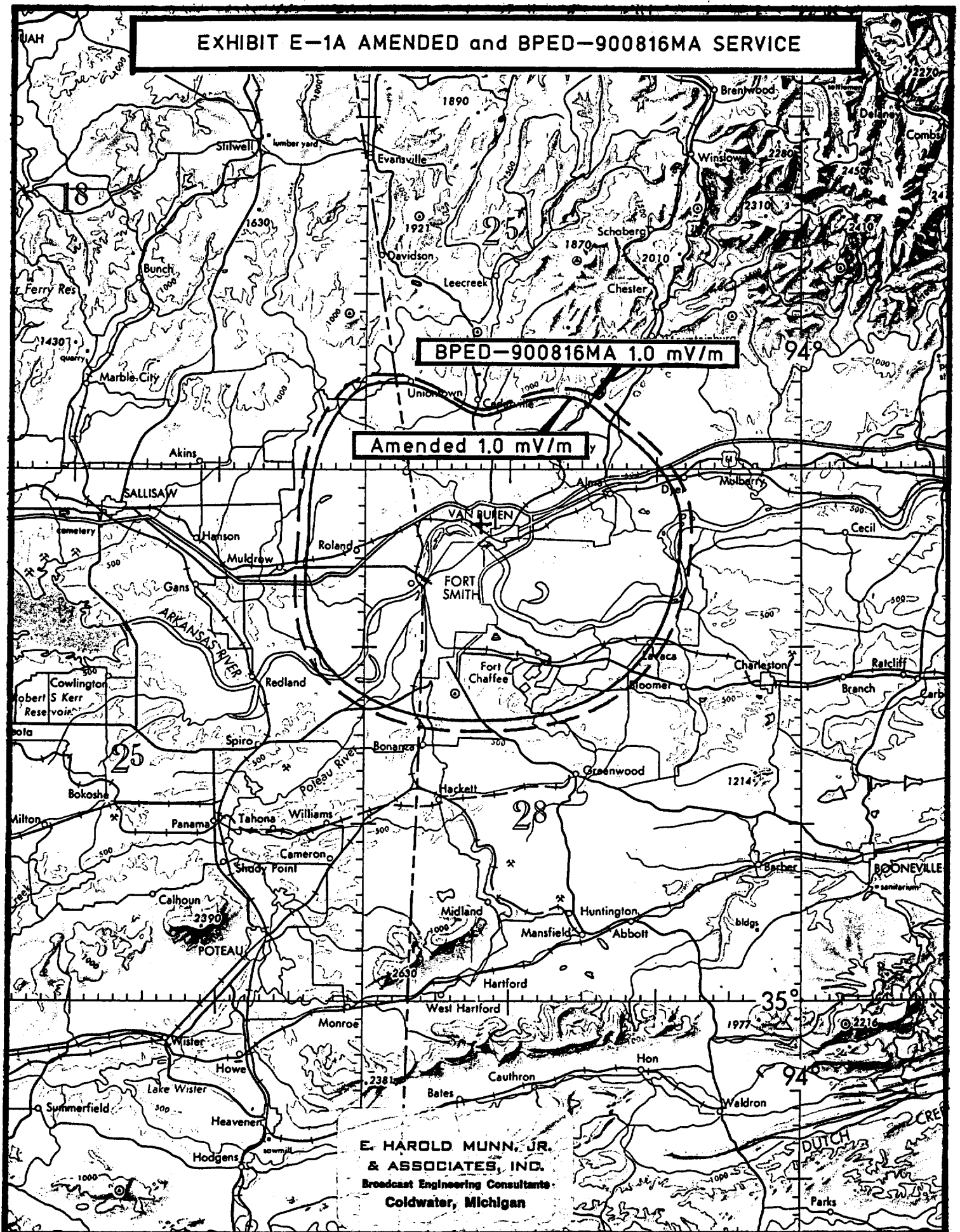
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Broadcast Engineering Consultants  
Coldwater, Michigan

EXHIBIT E-1A AMENDED and BPED-900816MA SERVICE

BPED-900816MA 1.0 mV/m

Amended 1.0 mV/m

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Broadcast Engineering Consultants  
Coldwater, Michigan



## EXHIBIT E-2

### ANALYSIS OF TOPOGRAPHIC DATA EMPLOYED

The topographic data employed in this application is based on the National Geophysical Center thirty second point topography data base, TPG-0050.

The averages calculated include 130 points between 3 and 16 km from the proposed transmitter site.

The transmitter site elevation was determined by means of 7.5' series topographic mapping. The site coordinates were also developed from the 7.5' series map. A portion of that map is included in this report as Exhibit E-5.

In the event a detailed topographic analysis using the 7.5' maps is required, such an analysis will be performed and supplied.

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Coldwater, Michigan

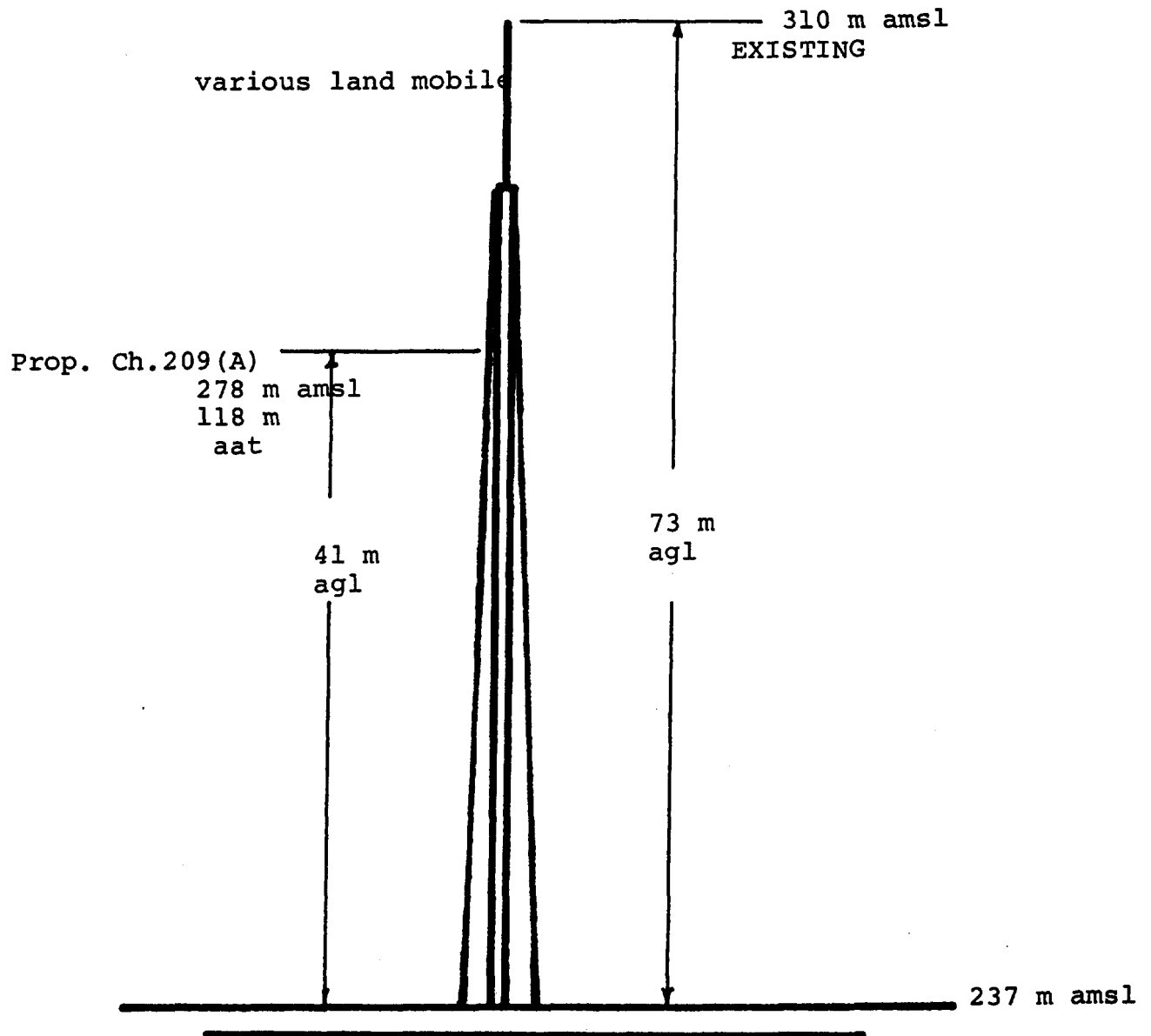
EXHIBIT E-3

VERTICAL PLAN

SITE LOCATION

Single, self-supporting steel tower  
with land mobile services at top.  
Tower is EXISTING, no height change

NL 35°26'51"  
WL 94°21'54"  
Mt. Vista, Reservoir Hill, Van Buren,  
Crawford Co., Arkansas



not to scale

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Coldwater, Michigan



EXHIBIT E-4

PROPOSED FM OPERATING SPECIFICATIONS

Applicant: Bible Broadcasting Network

Frequency: 89.7 MHz Channel: 209(A) ERP: 0.8 kW HAAT: 118 (meters)

Transmitter Location: Mt. Vista, Reservoir Hill, VanBuren

County: Crawford

State: Arkansas

Site Coordinates: NL 35°26'51"; WL 94°21'54"

Site Elevation: 237 meters

Proposed Operation:

Effective Radiated Power: 0.8 (kW)H 0.8 kW(V)

Height of Antenna Radiation Center Above:

	<u>Average Terrain</u>		<u>Mean Sea Level</u>		<u>Gnd.</u>
H	118	meters	278	m	41 m
V	118	meters	278	m	41 m

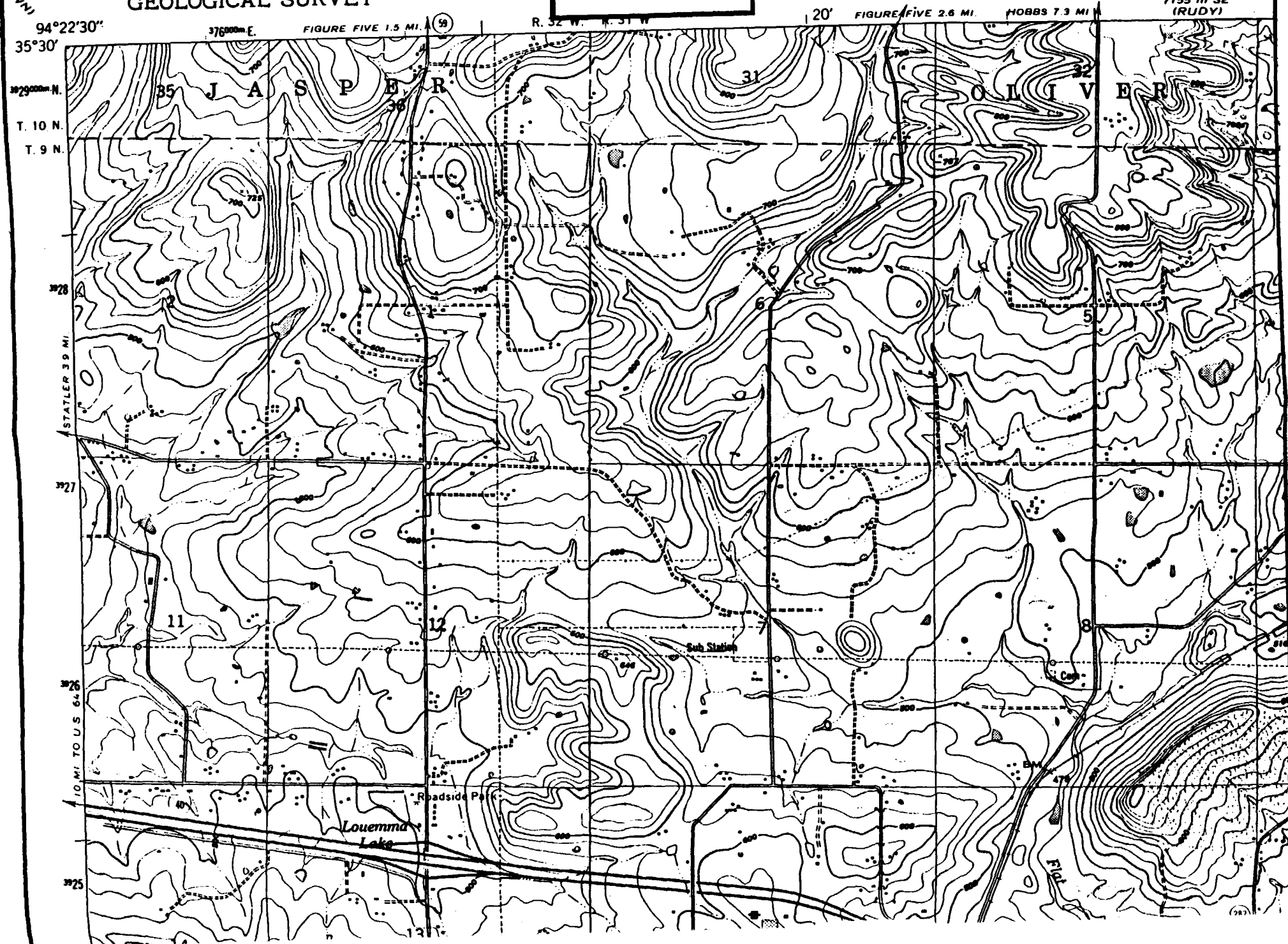
Overall Height of Structure Above Ground: 73 meters

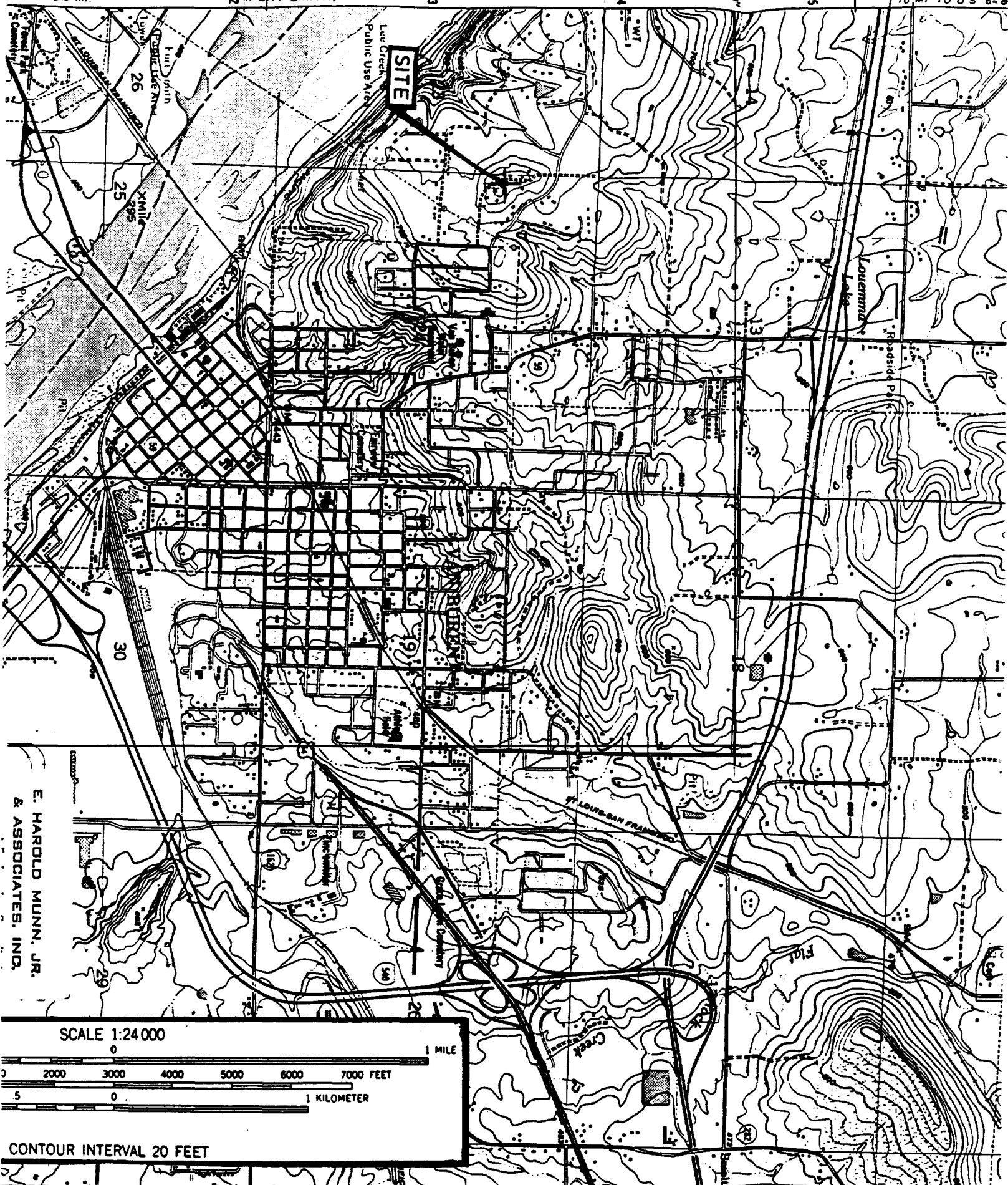
Overall Height of Structure Above Mean Sea Level: 310 meters

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

EXHIBIT E-5

DEPARTMENT OF THE  
CORPS OF ENGINEERS





**E. HAROLD MUNN, JR.  
& ASSOCIATES, INC.**

